

MINING APPLICATION  
NO. \_\_\_\_\_

Date \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116



MINING AND RECLAMATION PLAN

(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company Rush Valley Enterprises, Inc.
2. Proposed type of operation Mining and Refining
3. (a) Prior Land Use(s) Mining and Grazing  
(b) Current Land Use(s) Mining and Grazing  
(c) Possible or Prospective Future Land Use(s) Grazing
4. What vegetation exists on the land proposed to be affected \_\_\_\_\_  
See Attached Sheet  
(a) Types and Estimated Percent cover or density: \_\_\_\_\_  
Average 19.6%
5. What is the range pH of soil before mining? 8.2 pH  
Name of Person or Agency and method of determining pH Ford Chemical  
Company & Utah State University (See attached sheets)
6. Site elevation above sea level 5,250
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) N/A
8. Estimated duration of mining operations 10-20 years
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (X) No  
Does the above material being moved have any other characteristics affecting revegetation? NO
10. Will any underground workings or aquifers be encountered? ( ) Yes (X) No  
Describe \_\_\_\_\_  
Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (X) No If yes, describe the quality of water being discharged. None

11. Describe specifically a detailed procedure for:

- (a) The mining sequence
- (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
- (c) The procedure for site preparation including removing trees and brush.
- (d) The method for removing and stockpiling topsoil or disturbed materials.
- (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic material.
- (f) A procedure for final stabilization of disturbed materials.

#### GRADING AND REGRADING

Specifically describe:

- (a) Typical cross-section of regrading.
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

#### TESTING

1. Describe method for testing stability of reclamation fill material.

On-site visual inspection of slopes, highwalls and back-filled areas  
conducted to ensure stability

Describe method for the testing of soil that is intended to support  
vegetation

Treatment and Seeding

2. Describe any soil treatment employed as an aid to revegetation Application  
of nitrogen and phosphorus fertilizers to stimulate early establishment of  
revegetation species.

3. Describe surface preparation of areas intended to support vegetation:

Surficial material suitable as a growing medium shall be re-distributed  
over backfill and contoured or terraced in such manner as to promote re-  
vegetation establishment and success.

#### REVEGETATION

1. Revegetation to be completed by:

(X) Operator with Consultation

( ) Soil Conservation District

( ) Private Contractor

Name \_\_\_\_\_

( ) Other (specify) \_\_\_\_\_

( ) Hydroseeding

( ) Aerial Seeding

( ) Conventional or Rangeland Drilling

( ) Other (specify) \_\_\_\_\_

2. Will Mulch be used? No

Type \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

STATE OF UTAH

COUNTY OF SALT LAKE

I, ARLON JACOBS, having been duly sworn  
depote and attest that all of the representations contained in the foregoing  
application are true to the best of my knowledge; that I am authorized to  
complete and file this application on behalf of the Applicant and this  
application has been executed as required by law.

Signed: Arton E Jacobs  
ARLON JACOBS, President

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this 28<sup>th</sup> day of August, 19 80.

Notary Public: Eva H. Goodfellow

My Commission Expires: 12-1-82

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:

"Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES ARJ (Initial)

NO \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

<u>ALL</u>	_____	_____
_____	_____	_____
_____	_____	_____

## MINING AND RECLAMATION PLAN

### 11 (a) The mining sequence

The mining sequence will follow the surface operation type and specifically the strip and open pit type.

The mining sequence will follow the proposed operations as outlined in the sub-headings of this question 11 and specifically (d), (e) and (f).

The equipment to be used in this operation will be scrapers, track-loaders with rippers and trucks.

Restoration of operation will be done with scrapers, dozers, compactors and trucks.

### (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.

The construction and maintaining of access roads will be done by grading a 20-foot wide path and establishing a crown and natural drainage ditches on either side. If the existing soils will not compact, then the residue from the mining operation will be used and if the residue will not compact, then road base will be used to develop a hard surface for the roads.

The roads will be maintained with a road grader and water wagon.

### (c) The procedure for site preparation including removing trees and brush.

Please refer to sub-heading (d) of this question No. 11.

Since there are no trees on this site but only weeds and sage brush, the preparation will be a grubbing process only where by the growth will be put in piles for burning by permission of the local authority.

### (d) The method for removing and stockpiling topsoil or disturbed materials.

Prior to any major excavation, all surficial soil material suitable for sustaining plant life will be segregated and stockpiled in such manner as to minimize erosion by wind and hydrologic action. Stockpiles will be created so that unnecessary compaction of material shall be minimized and where slopes shall not exceed the critical angle of repose. (Reasonable precautions will be exercised so as to insure that contamination by undesirable materials will be held to a minimum.)

### (e) The method for the placement or containment of all disturbed materials to include the method for handling of all acid or alkali-producing and toxic materials.

All disturbed materials not immediately involved in the mining and milling process will be localized into waste piles or deposited as fill in inactive open cuts. All toxic or alkali-producing soils will be properly and reasonably isolated so as conformance with all appropriate regulations of Federal Government and State Division of Health are met.

### (f) A procedure for final stabilization of disturbed materials.

Operator will consult with soil conservation service before final stabilization of disturbed materials program is initiated.

Operator proposed to regrade all waste piles, soil piles and fills to rounded configurations where slopes will be less than critical angle of repose. All high wall cuts will be backfilled to achieve a stabilized slope of 45° or less. All slopes shall be regraded so as to minimize erosion and safety hazards.

Operator proposes that a diverse mixture of re-vegetative plant species be reseeded by rangeland drill method in not less than ten-acre tracts. Such seeding and reclamation of the site in question to progress as mining operation also progresses and reverts land to the revegetative program.

#### GRADING AND REGRADING

11 (a) Typical cross-section of regrading.

Please refer to sub-headings (b), (c), (d) and (e) of this question No. 11 (Grading and Regrading).

Since only a minute amount of materials (minerals) will be extracted from the operation, the site will be approximately restored to its original conditions.

(b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.

Where possible, topsoil and/or upper horizon material shall be evenly re-distributed over disturbed areas in thickness equal to or greater than surface soil depth prior to commencement of mining operation.

(c) What type of soil treatment will be utilized.

After topsoil or upper horizon material has been re-distributed and contoured to accepted standards as already specified herein, site will receive two directional harrowings and fertilizations prior to reseedling.

(d) Method of draining control for the final regraded area.

In re-distributing surface and fill materials, consideration will be given to topographical design in order that all drainage channels may be perpetuated. Operator shall insure that the property will have adequate surface draining, drainage structures and ditching so land may revert to a generally suitable condition for continued use.

(e) Maximum Grading Slope

Operator will assure that all disturbed and recontoured slopes shall not exceed 45°.

2. Will Mulch be used? ( ) Yes (X) No

Type: \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Agropyron Crestatum	5 lbs.	A11	A11	Fall
Agropyron Trichophorum	11 lbs.	A11	A11	Fall
Elymus Junceous	12 lbs.	A11	A11	Fall
Agropyron Intermedium	10 lbs.	A11	A11	Fall
+		A11	A11	F A11

+Other native & introduced species as recommended by Soil Conservation Service.

4. Will affected area be subject to livestock or wildlife grazing?

(X) Yes ( ) No Will vegetation protection be needed? Yes, Livestock  
Grazing should be restricted until species are firmly established which  
could be the beginning of the 3rd or 4th growing seasons. Seeding stands  
should be lightly grazed until they fill in and reach their full production.

5. Will irrigation be used: ( ) Yes (X) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety release is granted. Operator will strive for vegetative cover represent-

ing at least 70% of surrounding representative plant communities as  
determined by accepted inventory methods and where sufficient surficial  
soil exists to adequately cover solid rock outcrops and fill material. The  
area will be reseeded if necessary.